Company Analytics Dashboard

Abstract

- Context: Understanding employee working preferences and weekend work patterns is crucial for optimizing workforce management.

- Goal: To provide actionable insights into how employees work, particularly focusing on weekend remote work, using data analysis and visualization.

Software Requirements:

- Power BI Desktop: For data analysis and visualization.

- Database Management System (DBMS): For storing and managing raw data (e.g., SQL Server, Oracle).

- Excel: For importing data

Architecture:

- Data Source: Employee data (timesheets, login records, surveys).

- ETL Process: Extract, Transform, Load using Power BI's Power Query.

- Visualization Layer: Power BI for creating and sharing reports.

Process Flow

1. **Data Collection:** Gather data on employee working preferences and weekend work patterns.The dataset that we have uses is a company data collection.

2. **Data Cleaning & Transformation:** Leveraged advanced SQL to transform company analytics data by modifying data types and removing unnecessary columns, ensuring data sets were optimized for analytics and reporting.
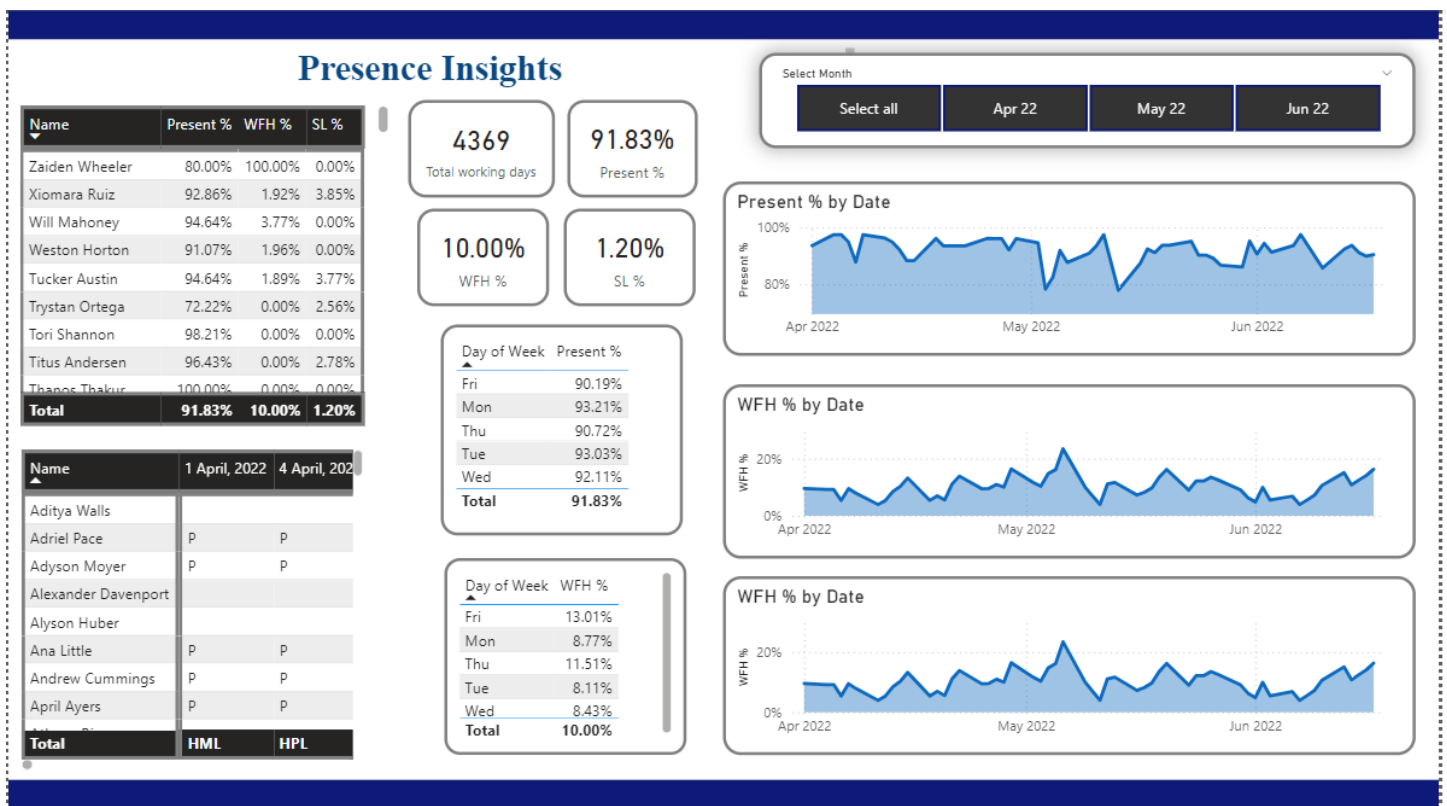
   Steps:

   - **Data Cleaning:** Removed duplicates, handle missing values, and correct inconsistencies (e.g., standardizing location names).

   - **Data Transformation:** Converted data types, created new calculated columns (e.g., work from home percentage), and aggregated data as needed (e.g., by week, month, or department).

   - **Tools:** Used Power Query in Power BI for data cleaning and transformation tasks.

3. **Data Analysis:** Utilized PowerBI to identify, analyze, and visualize trends or patterns in complex data sets, providing valuable insights into business processes, financial calculations, capacity/demand forecasting, data flows, and host systems.

4. **Visualization:** Analyzed remote work trends and preferences using Advanced Excel Calculations to determine the percentage of employees working from home, informing strategic workforce planning and aligning with relevant KPI metrics.

Visualizations:

- **Bar Chart:** To show the percentage of employees preferring different working arrangements (e.g., home, office, hybrid).

- **Pie Chart:** To illustrate the proportion of employees working from home during weekends.

- **Line Chart:** To display trends over time (e.g., increase in home working during weekends).

- **Table:** To show detailed data by department, role, or location.

5. **Reporting:** Applied advanced PowerPoint and Think-Cell skills to interpret and present data requirements and specifications, using advanced statistical techniques to generate actionable insights and ongoing reports, ensuring data-driven decision-making

Presence Insights

Select Month

| Select all | Apr 22 | May 22 | Jun 22 |

Name	Present %	WFH %	SL %
Zaiden Wheeler	80.00%	100.00%	0.00%
Xiomara Ruiz	92.86%	1.92%	3.85%
Will Mahoney	94.64%	3.77%	0.00%
Weston Horton	91.07%	1.96%	0.00%
Tucker Austin	94.64%	1.89%	3.77%
Trystan Ortega	72.22%	0.00%	2.56%
Tori Shannon	98.21%	0.00%	0.00%
Titus Andersen	96.43%	0.00%	2.78%
Thanos Thakur	100.00%	0.00%	0.00%
Total	**91.83%**	**10.00%**	**1.20%**

Name	1 April, 2022	4 April, 202
Aditya Walls		
Adriel Pace	P	P
Adyson Moyer	P	P
Alexander Davenport		
Alyson Huber		
Ana Little	P	P
Andrew Cummings	P	P
April Ayers	P	P
Total	**HML**	**HPL**

4369
Total working days

91.83%
Present %

10.00%
WFH %

1.20%
SL %

Day of Week	Present %
Fri	90.19%
Mon	93.21%
Thu	90.72%
Tue	93.03%
Wed	92.11%
Total	**91.83%**

Day of Week	WFH %
Fri	13.01%
Mon	8.77%
Thu	11.51%
Tue	8.11%
Wed	8.43%
Total	**10.00%**

Present % by Date

WFH % by Date

WFH % by Date

Testing

- **Data Validation:** Ensure data accuracy and consistency.

- **Report Testing:** Validate the correctness of the visualizations and the accuracy of calculations.

- **User Testing:** Ensure the report meets the needs of stakeholders and is user-friendly.

This approach provides a structured way to understand working preferences, determine weekend work-from-home patterns, and generate insightful reports using Power BI.